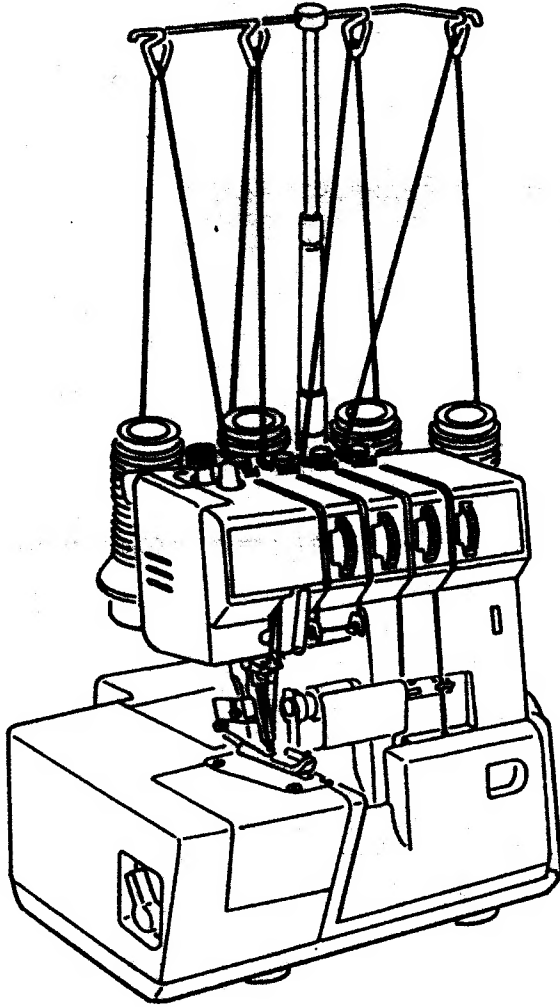




**RICCAR®**

# **INSTRUCTION MANUAL**



**TWO NEEDLE, FOUR THREAD (KNIT-LOCK)**

**Serger**

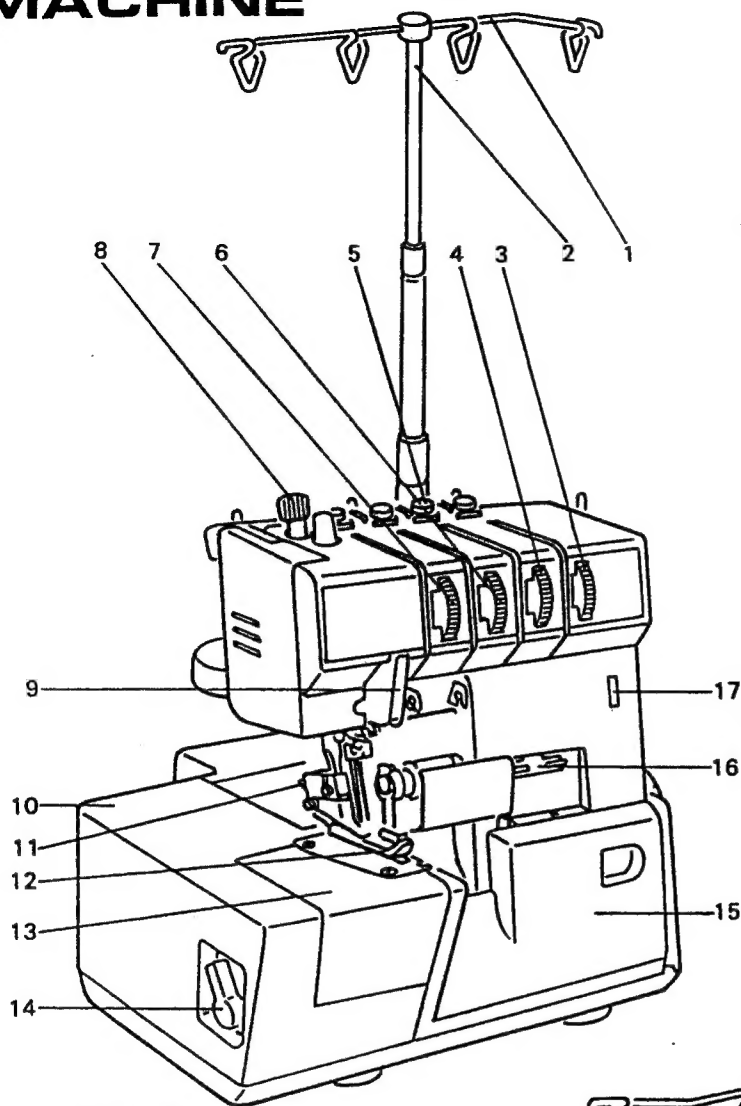
**MODEL RICCAR® LOCK RL624**

*IBRL 624*

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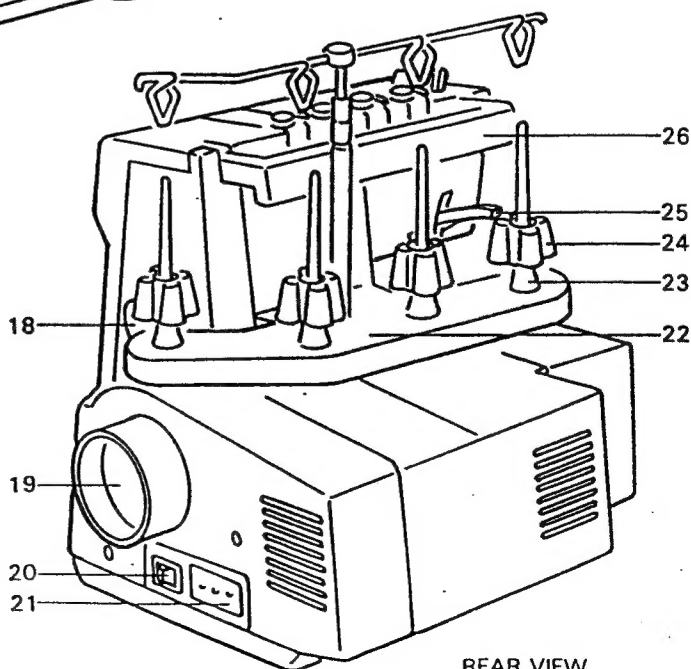
# GETTING TO KNOW YOUR SEWING MACHINE



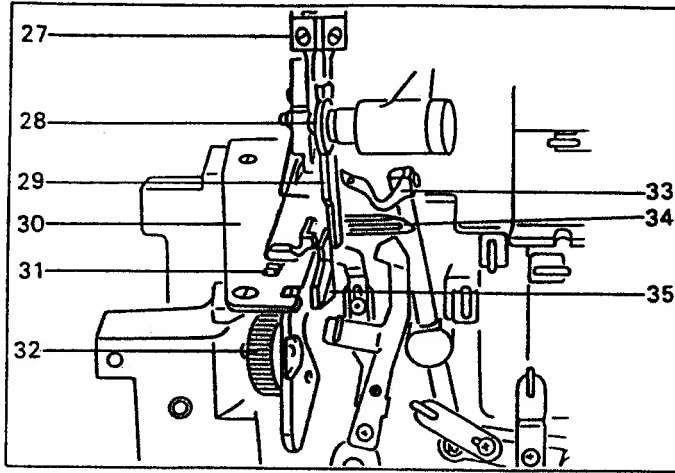
FRONT VIEW

1. Thread Guide Hanger
2. Extension Bar
3. Lower Looper Thread Tension Dial
4. Upper Looper Thread Tension Dial
5. Thread Guide and Tension Disc
6. Right Needle Thread Tension Dial
7. Left Needle Thread Tension Dial
8. Pressure Regulator
9. Thread Take-up Lever
10. Extension Table
11. Presser Foot Releasing Lever
12. Presser Foot
13. Free Arm
14. Extension Table Lock/Release Lever
15. Front Cover
16. Looper Thread Guide
17. Stitch Length Regulator

18. Stitch Length Regulator Dial
19. Hand Wheel
20. Light & Power Switch
21. Terminal Box
22. Spool Stand
23. Spool Pin
24. Spool Supporter
25. Presser Foot Lifter
26. Handle



REAR VIEW

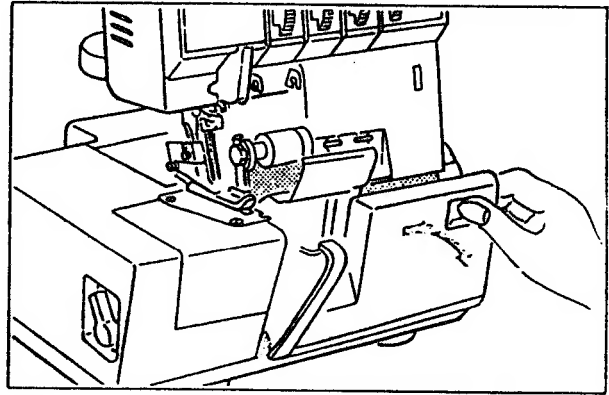


**INSIDE OF FRONT COVER AND FREE ARM COVER**

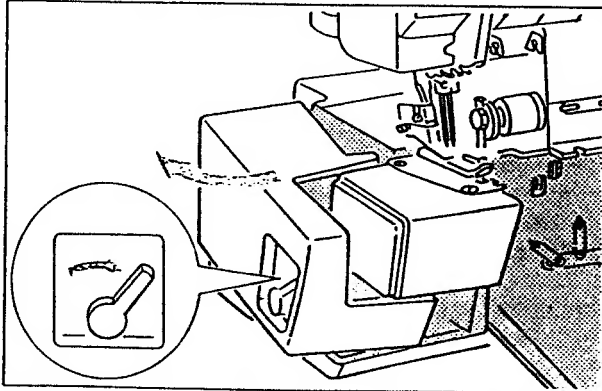
- 27. Needle Clamp
- 28. Upper Knife Holder
- 29. Upper Knife
- 30. Throat Plate
- 31. Feed Dog
- 32. Seam Width Knob
- 33. Upper Looper
- 34. Lower Looper
- 35. Lower Knife

## ACCESS TO THREAD GUIDES AND FREE ARM

1. Place thumb in hollow of front cover and slide it to the right as far as possible; pull cover down toward you.
2. To close, lift cover up and it will snap into place.
3. Be sure that the cover is properly closed before starting to sew.

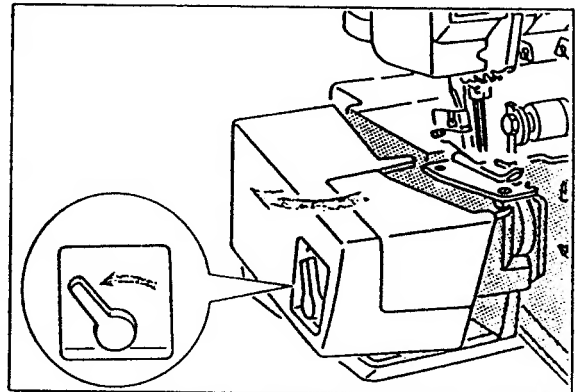


### Opening the Extension Table



1. Turn lever located on left side of Extension Table toward front of machine.
2. Pull Extension Table out to open.
3. To close push shut and turn lever in opposite direction. This locks the Extension Table to Free Arm Cover.

### Removing the Free Arm Cover

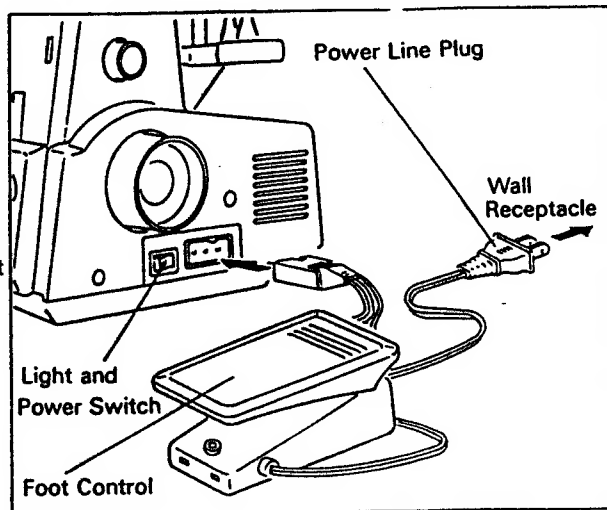


Swing Extension Table out with lever in locked position and Free Arm Cover will stay attached to the Extension Table.

# ELECTRICAL CONNECTION

Connect the electrical cord to the machine by inserting the three-hole plug into the terminal box located on the right side of the machine. Connect the cord plug into an electrical outlet.

The light and power switch is located alongside the terminal box. To turn power on, push on left side of switch. Turning on the power lights up the stitching area. The machine will not operate unless the switch is on. Place Foot Control on floor where it is easy to reach with your foot. To make machine go faster, press down on Foot Control; to slow down let up slightly.



## CAUTION

1. Disconnect the electrical cord from the wall outlet when machine is not in use or when it is being cleaned.
2. Turn the power switch to the "OFF" position before changing needles or throat plates, and before connecting the cord. This will help prevent accidents.

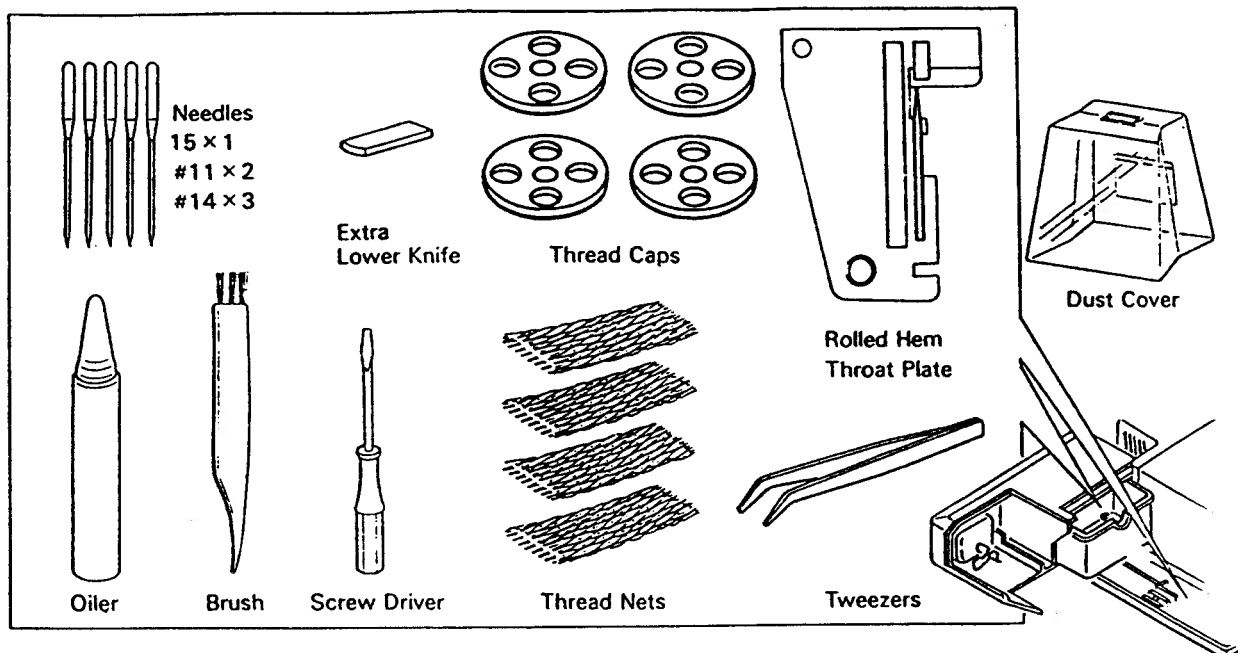
# SPECIFICATIONS

Stitch length	1-5 mm
Seam width	Left Needle: 6.2-7.2 mm, Right Needle: 4.0-5.0 mm
Needle bar stroke	27 mm
Presser foot	Hinged, Snap On Type
Presser foot lift	5 mm
Needle	Type 15 × 1, 705, 130 size 11,14
Number of threads	4-3
Dimensions	Width: 290 mm × Depth: 230 mm × Height: 320 mm
Net weight	6.7kg

# ACCESSORIES

The accessories are provided in the accessory case located inside the extension table. And some accessories are provided on the base located under the extension table.

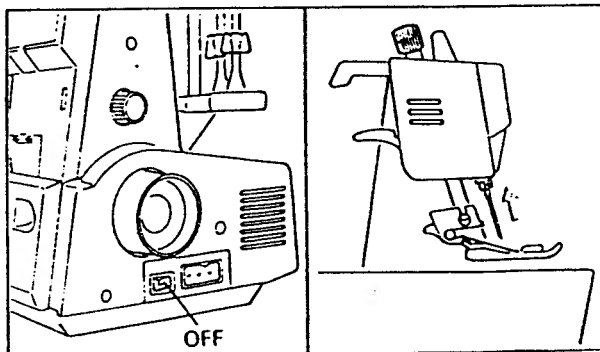
Open the extension table and pull the accessory case toward you.



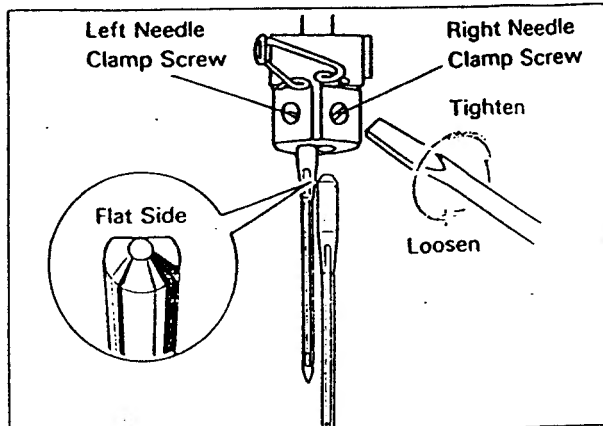
## INSERTING THE NEEDLE

Select the proper type and size needle for fabric used. (See page 6 "NEEDLE, THREAD AND FABRIC CHART")

1. Turn electrical power off.
2. Turn hand wheel toward you until the needle comes to its highest point.



3. Use the screw driver to loosen the Left and/or Right needle clamp screw, and remove the needle.
4. Place flat side of needle toward back of the machine, and insert in needle clamp as far as it will go.
5. Retighten the screw.



# NEEDLE, THREAD AND FABRIC CHART

The chart shows size and type of thread, and needle size for various weights and types of fabrics. Size means the fineness of both needle and thread.

FABRICS		THREADS	NEEDLE SIZES
LIGHTWEIGHT:  organdy, voile, taffeta, lawn, crepe		Cotton #100 Silk #100 Spun #80-100 Tetron #90	#11
MEDIUM WEIGHT:  gingham, satin, seersucker, linen, velveteen, gabardine, broadcloth		Cotton #60-80 Silk #50 Spun #60-90 Tetron #60-80	#11, #14
HEAVY WEIGHT:  denim, tweed, corduroy, pile fabrics		Cotton #40-60 Silk #40-50 Spun #60-90 Tetron #50-60	#14
KNIT	tricot	Spun #60-80 Tetron #60-80	#11
	jersey	Spun #60-80 Tetron #60	#11, #14
	wool	Spun #60-80 Tetron #50-60 Woolly nylon Woolly tetron	#14

# THREADING THE MACHINE

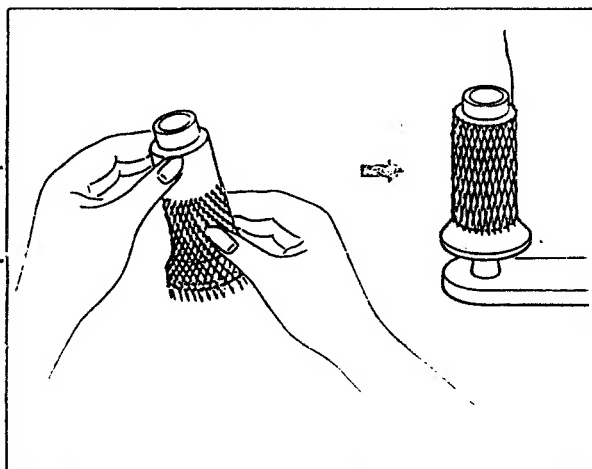
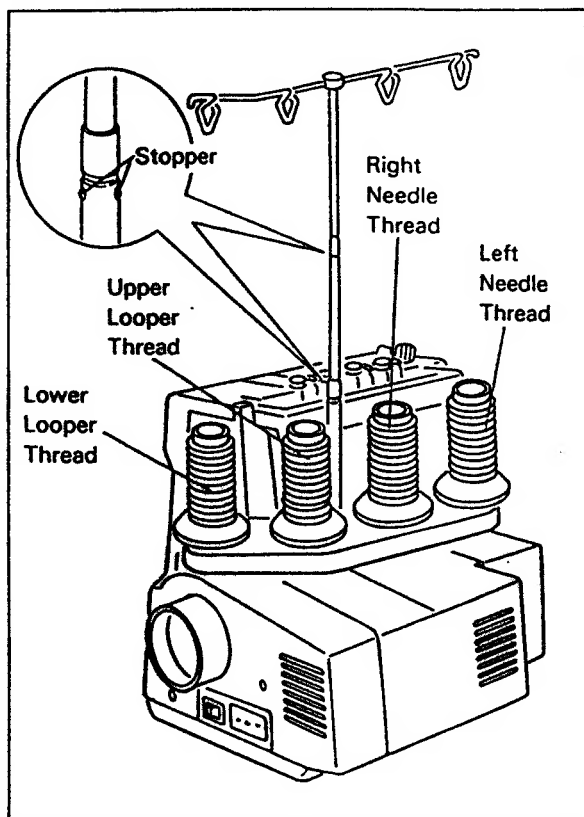
The machine comes threaded from the factory and must be rethreaded for use.

When rethreading, be sure to follow the directions given below. The machine will not sew properly if threaded incorrectly. An illustration for correct threading is given inside the front cover of the machine.

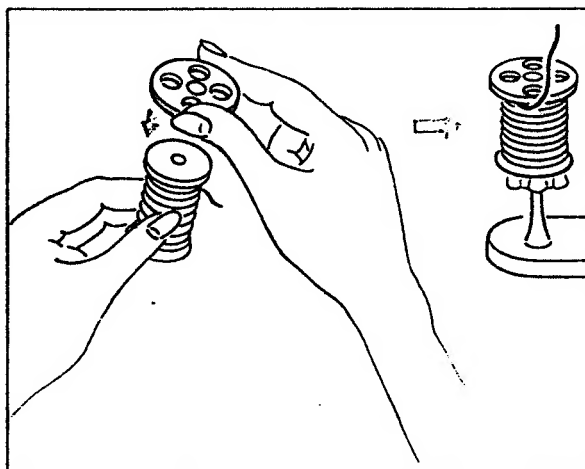
The thread guides are identified with color markings corresponding to the thread to which they belong. Thread looper threads before threading needle threads.

## extension bar

1. Pull the Extension Bar up as far as it will go.
2. Rotate the Thread Guide Hanger so that the Thread Guides are right above the spool pins.
3. Place the spools or thread cones on spool pins.



Thread spool nets are useful for synthetic threads which tend to come loose and slip out. Cover the thread cones with the thread nets provided with the accessories. Bring thread end to the top of the cone.

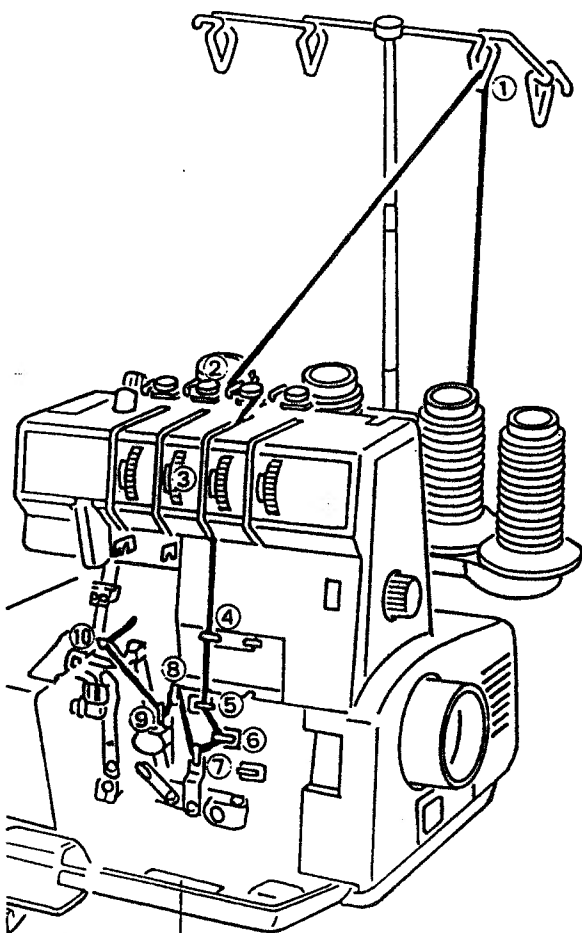


Thread caps are also provided with the accessories. They are used when sewing with regular spools. Insert the stem of cap into the spool hole.

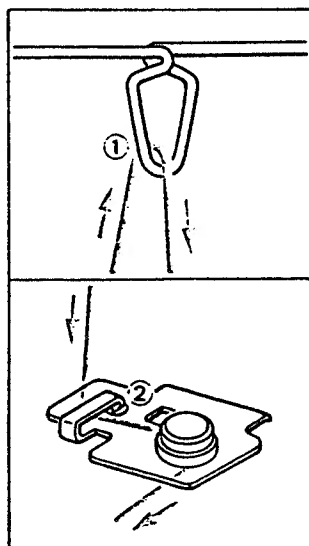


# threading the upper looper

Open the front cover and thread upper looper thread as illustrated below 1 to 10.  
Follow thread guides with green color markings on machine.

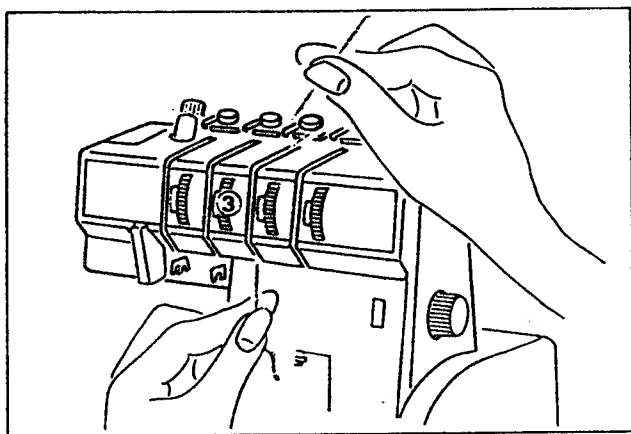


Threading chart

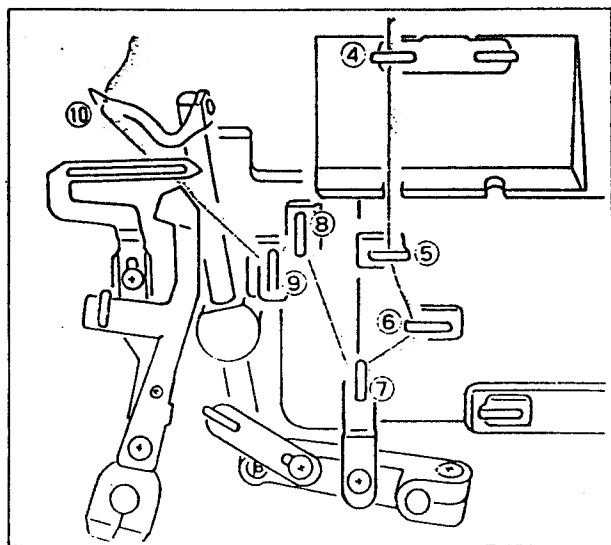


1. Pass thread through top guide from back to front.

2. Bring thread down and pass through thread guide and under Tension Disc.



3. Bring thread straight down through the slot so that it passes between the tension discs.



4. Hook thread into guide from the right side.

5. Hook thread from the left side.

6. Hook thread from the right side.

7. Hook thread from the bottom side and pull thread up.

8. Hook thread from the top side.

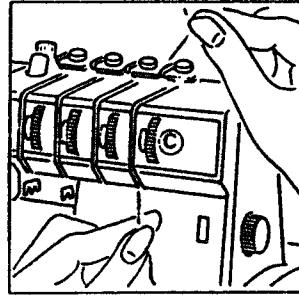
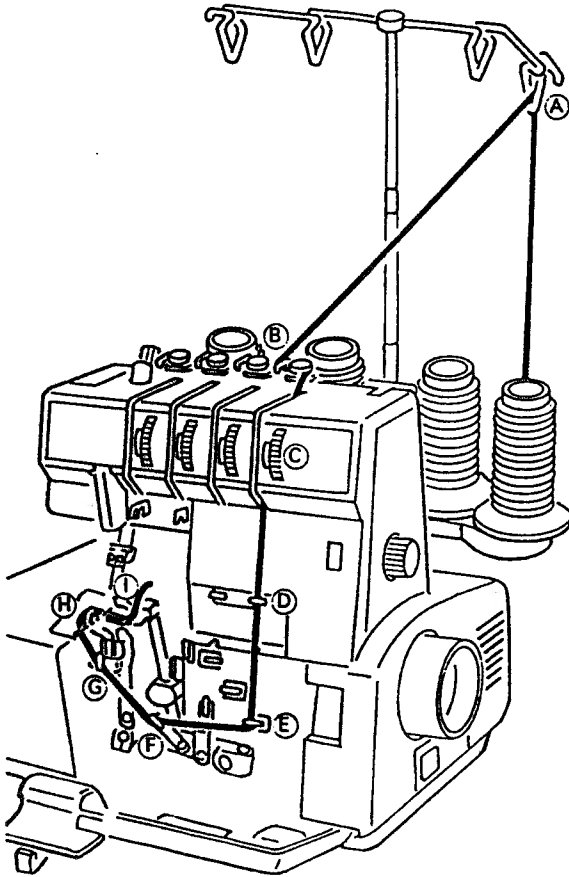
9. Hook thread from the bottom side and pull thread up.

10. Use tweezers to pass thread through the upper looper hole front to back. Pull at least 7 cm (3 inches) of thread through the upper looper.

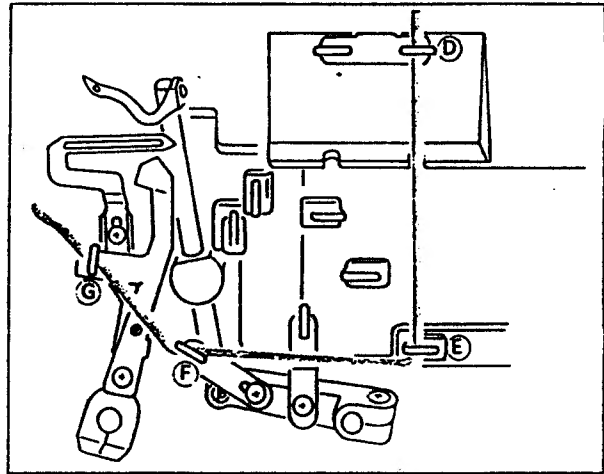
# threading the lower looper

Remove the free arm cover and thread lower looper thread as illustrated below A to I (Thread guides with blue color marking on machine).

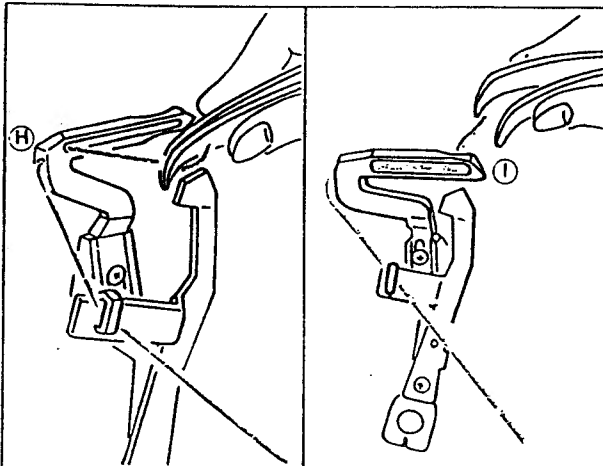
- A. Pass thread through guide from back to front.
- B. Bring thread down and pass through thread guide and under tension disc.



- C. Bring thread straight down along the slot so that the thread passes between the tension discs.



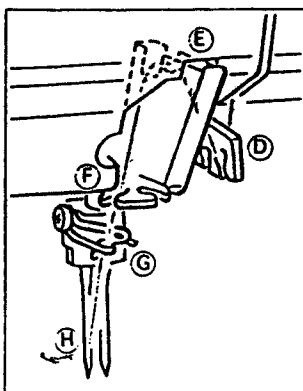
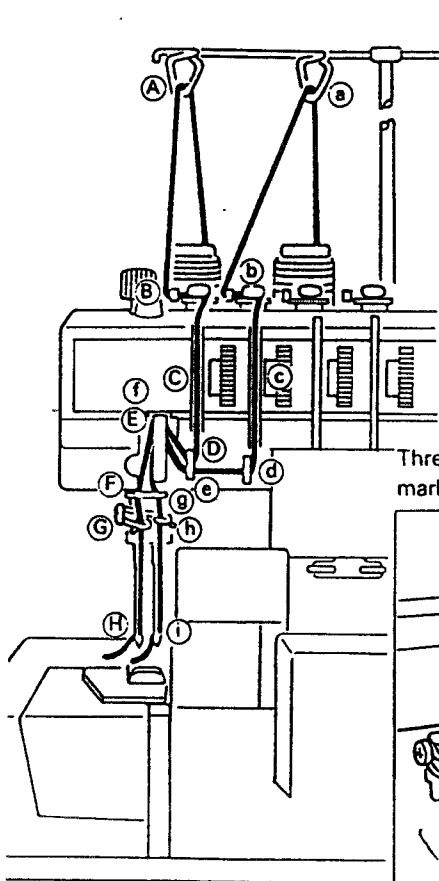
- D. Hook thread into guide from the left side.
- E. Hook thread from the right side and pull thread toward left.
- F. Hook thread from the bottom side.
- G. Hook thread from the bottom side and pull thread toward left.



- H. Turn hand wheel toward you until the lower looper is in extreme left side position. Pass thread through hole using the tweezers.
- I. Turn hand wheel until the lower looper is in extreme right position. Use the tweezers to pass thread through hole front to back. Pull at least 7 cm (3 inches) of thread through lower looper.

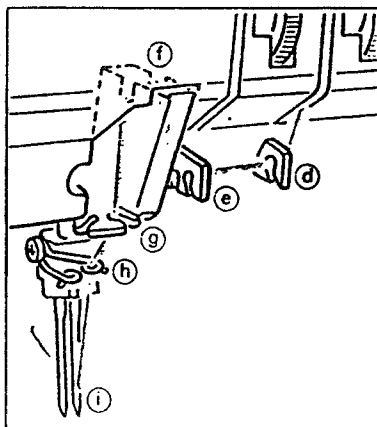
# threading the left and right needles

Thread left needle as illustrated below A to H ( Thread guides with yellow color marking on machine).



- A-C. Thread same sequence as threading upper and lower looper thread.
- D. Hook thread into this side opening of guide and pull thread up.
- E. Hook into guide by sliding thread across top and down into hole.
- F. Hook thread into left side opening of guide.
- G. Pass thread through guide.
- H. Use the tweezers to pass through the needle eye front to back. Pull at least 7 cm (3 inches) of thread through the needle eye.

Thread right needle as illustrated below a to i (Thread guides with red color marking on machine).

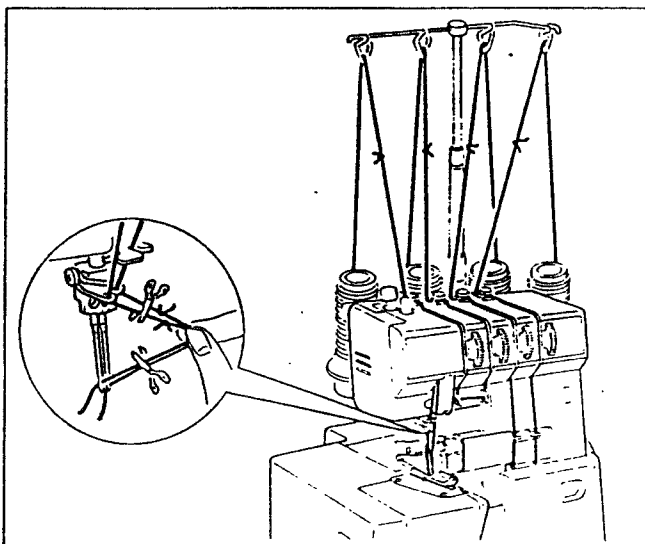


- a-c. Thread same sequence as threading upper and lower looper thread.
- d. Hook thread into guide and pull it toward left.
- e. Hook thread into depth side opening of guide.
- f. Hook into guide by sliding thread across top and down into hole.
- g. Hook thread into right side opening of guide.
- h. Pass thread through guide.
- i. Pass through needle eye front to back. Pull at least 7 cm (3 inches) of thread through the needle eye.

## easy thread changing

Instructions for changing threads are given below.

1. Cut the thread near the spools.
2. Exchange the spool with a new one and tie end to remaining thread making knot as small as possible.
3. Note the numbers on each Thread Tension Dial.
4. Turn Thread Tension Dials to the smallest number.
5. Press Foot Control and run machine until upper and lower thread knot comes through looper hole.
6. Stop needle thread knot before passing through eye of needle. Pull needle threads near the needle eye and cut thread knots.
7. Pass threads through needle eye manually.
8. Return tension dials to noted number.

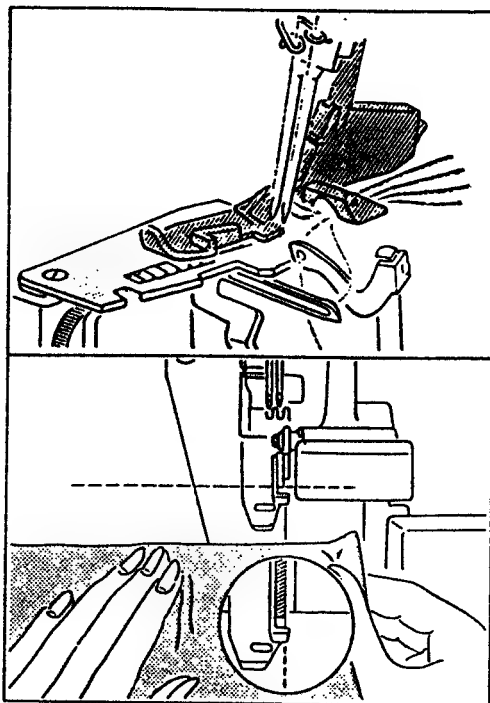


# BEFORE STARTING TO SEW

When the machine is plugged in properly and threaded correctly it is ready for sewing. To insure good stitches, make several sewing tests using the same fabric and thread on which you will sew. Make the proper adjustments while test sewing.

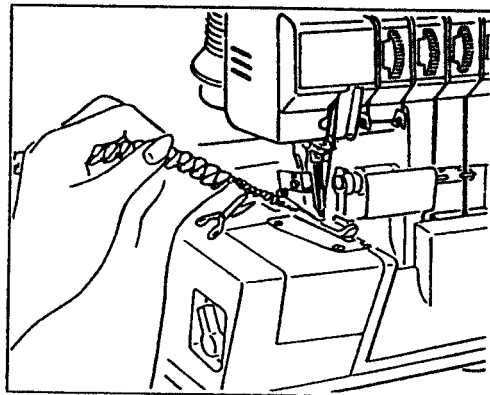
## starting to sew

1. Pull 4 threads under the presser foot and toward the back. Check that the threads near loopers and needles should not be caught by incorrect part.
2. Lower the presser foot.
3. Turn hand wheel toward you 2 or 3 times and check the thread chain.
4. Press Foot Control lightly pulling threads toward back and make thread chain about 5 cm (2 inches).
5. Place a scrap of fabric under the toe of the presser foot at the position to be stitched.
6. Hold end of thread with your left hand and pull gently when starting to sew.
7. When you have started sewing, place hand lightly on fabric. Start machine slowly and gradually increase the sewing speed.



## end of seam

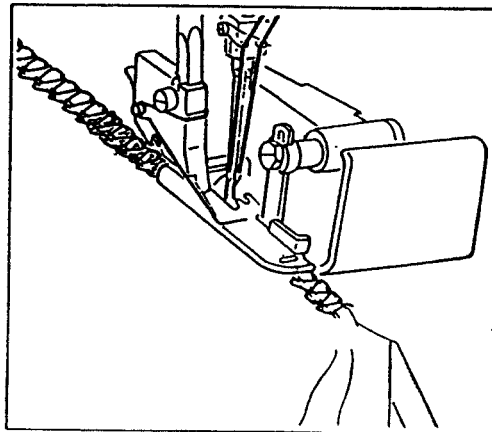
1. When the needle reaches the end of seam, chain off by running the machine until the thread chain is 6-7 cm (2-3 inches) long.
2. Stop the machine and cut the thread chain remaining 3-4 cm (1-2 inches) to the machine. Tie small knots in thread ends and treat with dot of seam sealant. Let dry and trim close to knot.
3. For neater finish, pull thread ends back through seam using hook or yarn needle.



## when thread breaks

If the thread breaks while sewing, remove fabric from machine and rethread as indicated below.

- Upper Looper Thread; turn hand wheel toward you until the upper looper is in the lowest position. Pass thread through the looper hole.
- Lower Looper Thread; cut the needle threads near needle hole and rethread the lower looper thread through its looper hole.
- Needle Thread; rethread left and right needle threads as indicated on page 10.



To begin sewing, place material 3-4 cm (1-2 inches) behind point where thread broke.

# OVERLOCK SEWING

## 2-needle, 4-thread

Your machine will sew overlock stitches and simultaneously trim the fabric.  
It is delivered from the factory preset to sew 2-needle, 4-thread overlock stitch.  
You may wish to make some adjustments to suit individual fabrics.

This machine can also sew 1-needle, 3-thread overlock stitch by removing one needle. (See page 14 "OVERLOCK SEWING 1-needle, 3-thread".)

The 2-needle, 4-thread stitch offers a stronger seam than the 1-needle, 3-thread stitch. Therefore, it is suitable for clothes that get hard wear and/or frequent washings, like sports wear, childrens wear and menswear.

## REGULATING THE THREAD TENSION

The stitch quality depends on proper balance between the four thread tensions. The tensions may require adjustment depending on the type of fabric, heaviness of fabric and size of thread used.

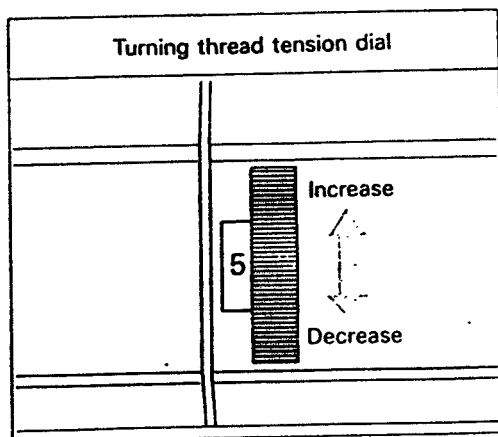
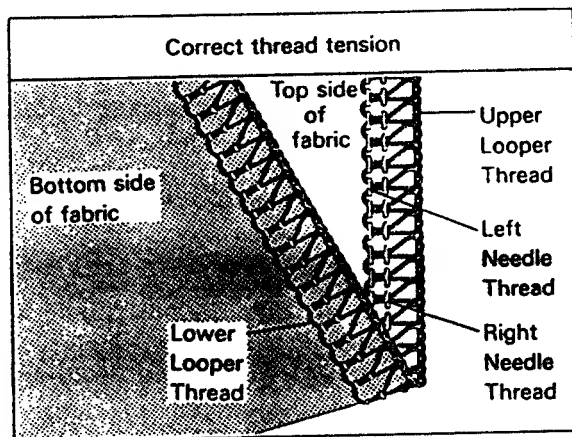
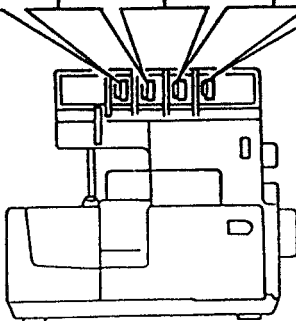
The table below is a guide for adjusting the thread tension.

Note: Be sure that the thread is passing between the tension discs.

Fabric	Left Needle Thread	Right Needle Thread	Upper Looper Thread	Lower Looper Thread
Light Weight	2.5-4.5	1.5-3.5	2.0-4.0	2.0-4.0
Medium Weight	2.5-4.5	1.5-3.5	2.0-4.0	2.0-4.0
Heavy Weight	2.5-4.5	1.5-3.5	2.0-4.0	2.0-4.0

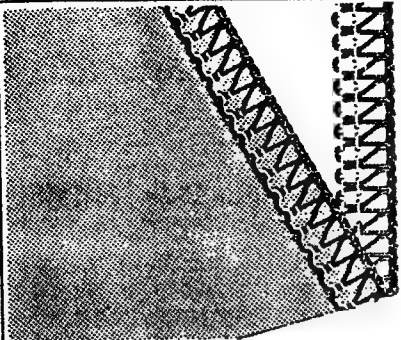
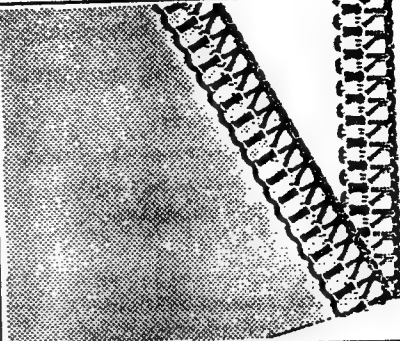
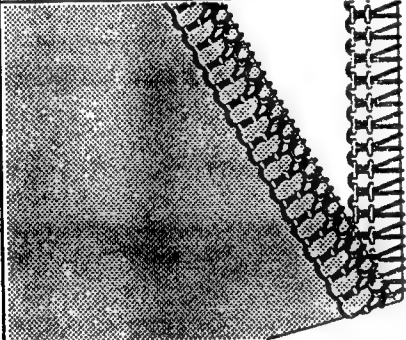
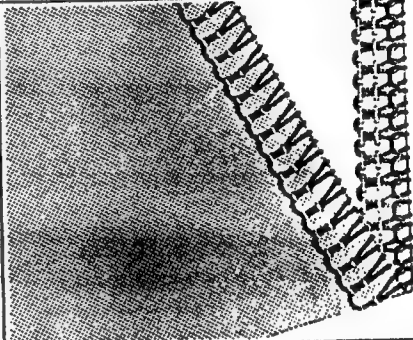
### NOTE:

This table is a guide for thread tensions when sewing with #80 to #90 polyester spun threads.



TO INCREASE, turn tension dial to a higher number.  
TO DECREASE, turn tension dial to a lower number.

The charts below are illustrations of stitches needing adjustment in the thread tension.

Left needle thread is too loose. (Clearly visible on the bottom side of fabric.)	Right needle thread is too loose.
	
Increase Left Needle Thread Tension and/or Decrease Upper and Lower Looter Thread Tensions.	Increase Right Needle Thread Tension.
Upper looper thread crossed on bottom side of fabric.	Lower looper thread crossed on top side of fabric.
	
Increase Upper Looter Thread Tension and/or Decrease Lower Looter Thread Tension.	Increase Lower Looter Thread Tension and/or Decrease Upper Looter Thread Tension.

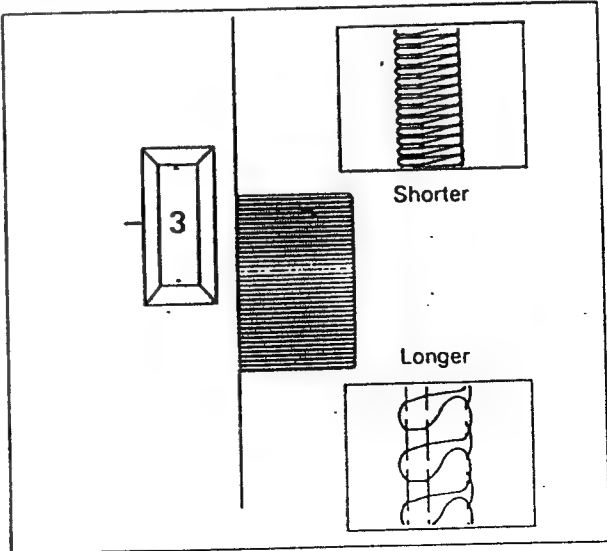
# SETTING STITCH LENGTH

The stitch length can be adjusted between 1 and 5 mm.

For shortest stitch, turn dial to 1.  
For longest stitch, turn dial to 5.

As a rule, light weight fabrics take a shorter stitches.  
Heavy weight fabrics need longer stitches.

Most normal sewing is done with stitch length dial set at 3. This produces a medium length stitch which makes a strong seam and is suitable for most fabrics.



# SETTING SEAM WIDTH

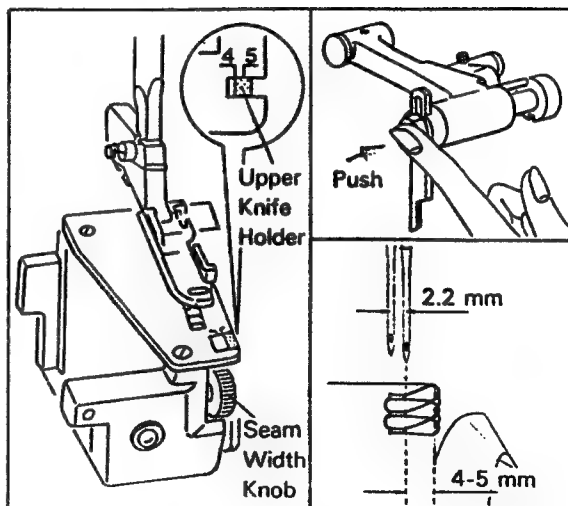
Overedge seam width can be adjusted from 6.2 mm (right needle 4.0 mm) to 7.2 mm (right needle 5.0 mm) width.

Normally the machine is set at 6.2 mm which is the width most frequently used. For heavy weight fabrics, set control knob to wider stitch.

1. Turn power switch off.
2. Open front cover and Free Arm Cover.
3. Push the Upper Knife Holder to the right and turn the Seam Width Knob downward to select wider stitch width. For smaller width turn knob in opposite direction.

When adjusting the width, use graduations on throat plate as guide and line up with left edge of lower knife holder.

The numbers marked on the throat plate are the width to the right needle, and the distance between needles is 2.2 mm. Therefore the width to left needle is an additional 2.2 mm.



## ADJUSTING THE PRESSURE ON FABRIC

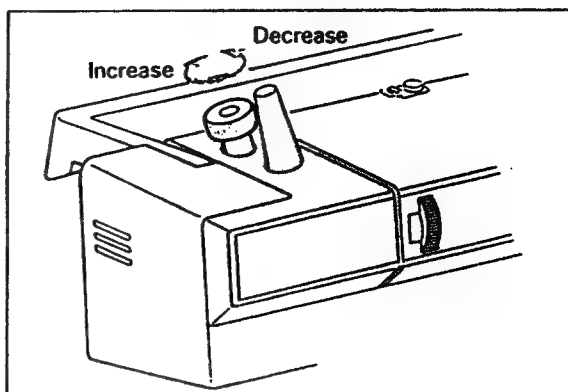
The pressure on the foot can be adjusted for different weight fabrics. The fabric should move along smoothly and evenly without slipping.

Stitches should be uniform in size.

The pressure on this machine is set for sewing medium weight fabrics.

For sewing light weight fabrics, decrease the pressure (turn screw to left).

For heavy weight fabrics, increase the pressure (turn screw to right).

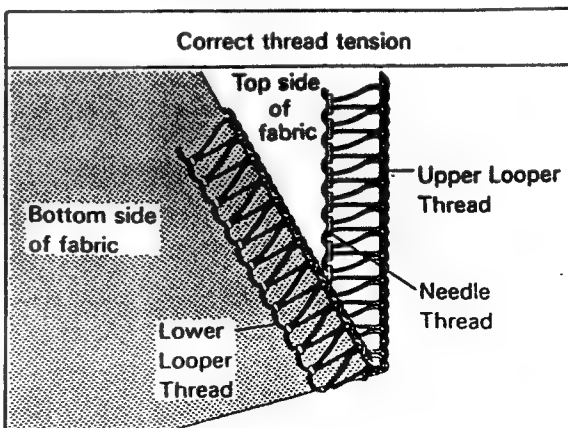


## OVERLOCK SEWING 1-needle, 3-thread

This machine can also sew 1-needle, 3-thread overlock stitching by removing one needle.

This is the standard overlock stitch and is suitable for most fabrics.

The sewing and tension adjustments are described on the next page.



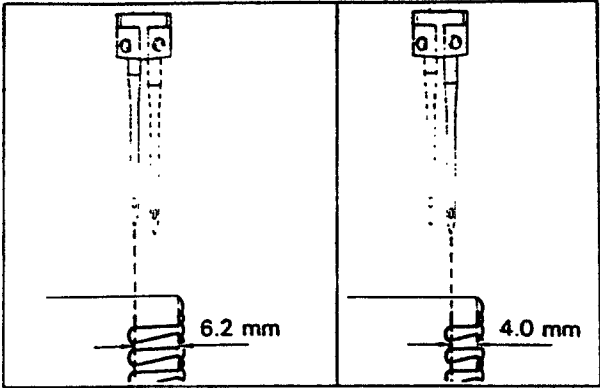
# 2-way seam width

You can sew 2-way seam width overedging by removing left or right needle.

To sew wider seam width (6.2 mm), remove the right needle (leave in the left needle). This is suitable for sewing heavy weight fabrics.

To sew narrower seam width (4.0 mm), remove the left needle (leave in the right needle). This is suitable for sewing light and medium weight fabrics.

Both seam widths can be adjusted by turning the seam width knob. (See page 14 "SETTING SEAM WIDTH")



## sewing

When you removed one needle, turn hand wheel 2 or 3 times and check the thread chaining.  
Chain off and test sew as same as 4-thread sewing.

Fabric Weight	Needle Thread (Left or Right)	Upper Looper Thread	Lower Looper Thread
Light	(Left) 2.0-4.0	2.0-4.0	2.0-4.0
	(Right) 1.5-3.5	2.5-5.0	2.0-4.0
Medium	(Left) 2.0-4.0	2.0-4.0	2.0-4.0
	(Right) 1.5-3.5	2.5-5.0	2.0-4.0
Heavy	(Left) 2.5-4.5	2.0-4.0	2.0-4.0
	(Right) 1.5-3.5	2.5-5.0	2.0-4.0

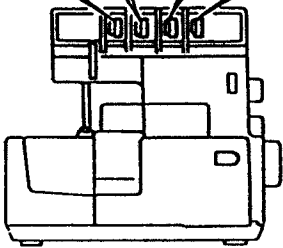
## thread tension

Use the chart to the right as a guide in setting tension.

Note: Be sure that the thread is passing between the tension discs.

The illustrations below are examples of stitches which need adjusting.

NOTE:  
This table is a guide for thread tensions when sewing with #80 to #90 polyester spun threads.



Needle thread is too loose. (Clearly visible on the bottom side of fabric.)	Upper looper thread crossed on bottom side of fabric.	Lower looper thread crossed on top side of fabric.
Increase Needle Thread Tension and/or Decrease Upper and Lower Looper Thread Tension.	Increase Upper Looper Thread Tension and/or Decrease Lower Looper Thread Tension.	Increase Lower Looper Thread Tension and/or Decrease Upper Looper Thread Tension.



# NARROW AND ROLLED HEMMING

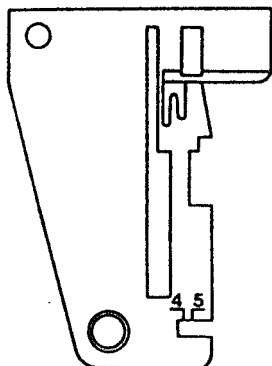
By changing the throat plate to "Rolled Hem Throat Plate" and using right needle only, the machine trims fabric, folds back the edge and sews a narrow hem (overedge). The width of the narrow overedge is 1.5 mm (about 1/16") and is used for overedging light and medium weight fabrics.

Two variations of the rolled overedge hem can be sewn with this machine by changing the thread tension. Both methods are used with light and medium weight fabrics.

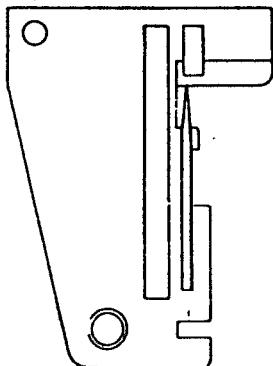
Method B (page 18) gives a softer finish by pulling the interlocking threads to the wrong side.

## changing the throat plate

The machine comes with a standard overedge throat plate set to the machine. Change the throat plate when sewing rolled overedges.

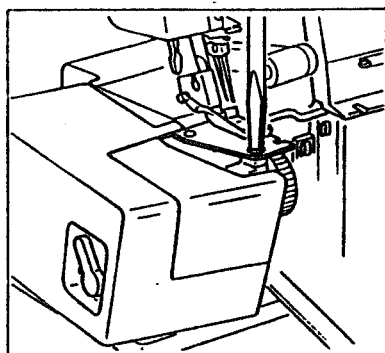
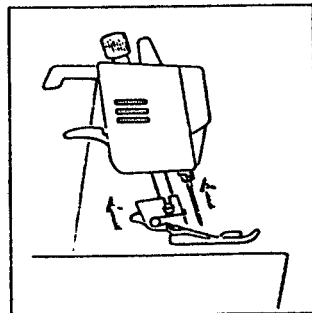
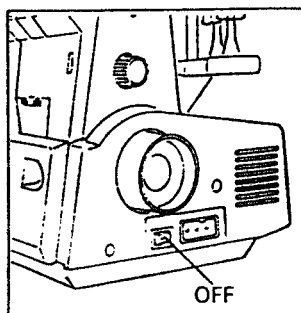


Standard Overedge  
Throat Plate

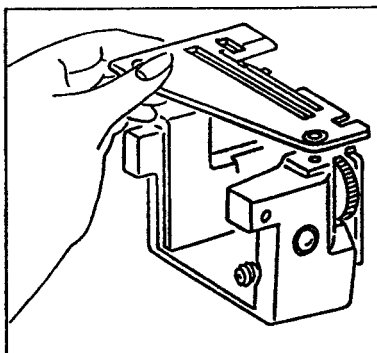


Rolled Hem  
Throat Plate

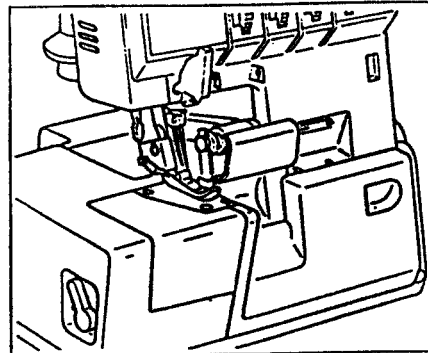
1. Turn power switch off.
2. Turn hand wheel toward you until needle is at its highest point.
3. Lift presser foot bar.



4. Open Extension Table and Free Arm Cover (See page 3).
5. Loosen the front side screw.



6. Lift the Throat Plate off and replace with Rolled Hemming Plate. (Be sure that thread is not caught under plate.)



7. Retighten the screw and replace Free Arm Cover.

# setting controls

Set the controls as follows.

## 1. Needle

Use right needle only. (Remove the left needle.)

## 2. Fabric, Thread & Needle Size

Refer to Page 6 "NEEDLE, THREAD & FABRIC CHART", for selecting suitable thread and needle sizes for sewing on light and medium weight fabrics.

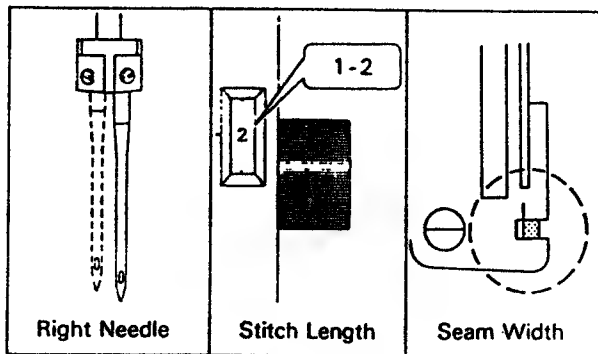
## 3. Stitch Length Regulator

Set stitch length between 1 and 2 mm.

## 4. Seam Width Knob

The seam width for sewing rolled overedges is normally 1.5 mm (about 1/16").

Turn seam width knob and adjust so that the left side of Lower Knife Holder is aligned with the mark of the Rolled Hem Throat Plate. (See page 14.)

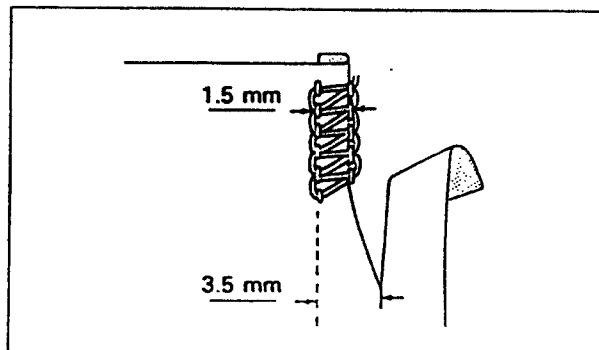


# sewing

Pull the excess threads gently toward the back and begin sewing.

Pull fabric lightly in the direction it is being fed.

Although the stitch width is set at 1.5 mm, you will actually need 3.5 mm (about 1/8") to provide enough fabric for the fold back.



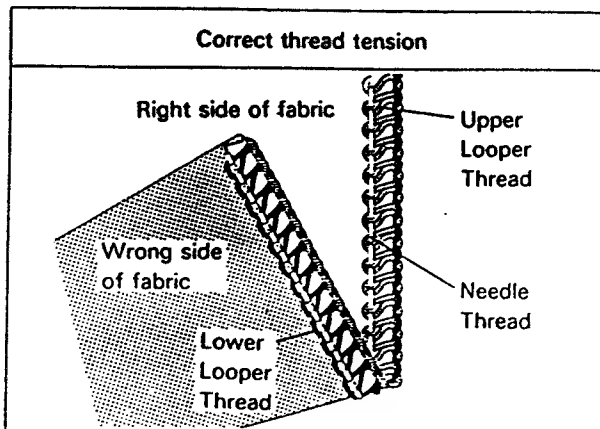
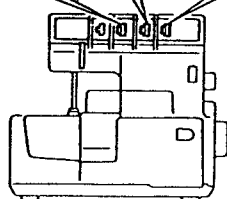
# thread tension -Method A

Use the chart below as a guide in setting tension.

The tension adjustments for Method A are the same as 1-needle, 3-thread overlock stitching except for the fabric edge is rolled to wrong side. See page 15 if adjustments are needed.

Fabric	Needle Thread (Right)	Upper Loper Thread	Lower Loper Thread
Light & Medium	1.5-3.5	4.0-6.0	2.0-4.0

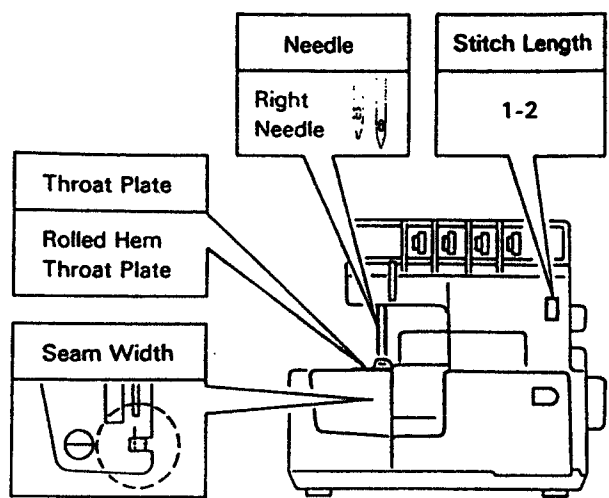
**NOTE:**  
This table is a guide for thread tensions when sewing with #80 to #90 polyester spun threads.



# ROLLED OVEREDGE -Method B

The upper looper thread sews through to the wrong side of fabric in Method B rolled overedge hem creating a softer finish.

Settings and sewing of Method B rolled overedge hem are the same as the Method A rolled overedge except for thread tension. (See below)

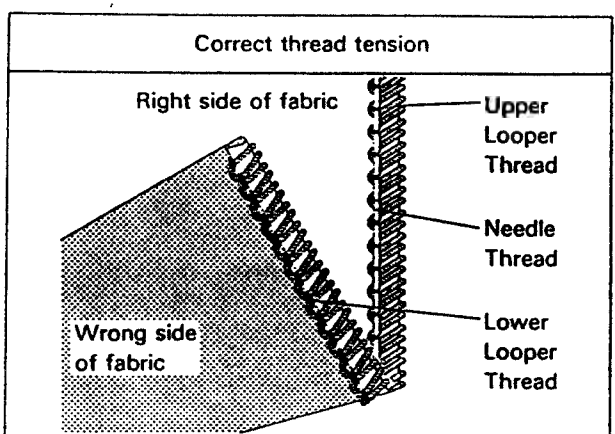
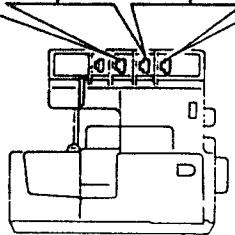


## Thread tension-Method B

Regulate the tension dials using guide below.

Fabric	Needle Thread (Right)	Upper Looper Thread	Lower Looper Thread
Light & Medium	1.5-3.5	2.0-6.0	4.0-7.0

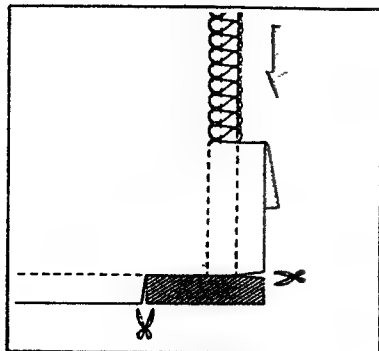
NOTE: This table is a guide for thread tensions when sewing with 30 to #90 polyester sewing threads.



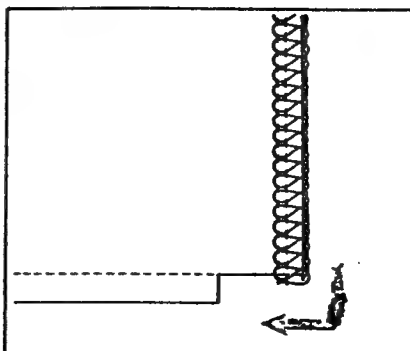
Needle thread is too loose.	Upper looper thread is too loose.	Lower looper thread is too loose.
Increase Needle Thread Tension or Decrease Upper Looper Thread Tension.	Increase Upper Looper Thread Tension.	Increase Lower Looper Thread Tension and/or Decrease Upper Looper Thread Tension.

# TURNING CORNERS

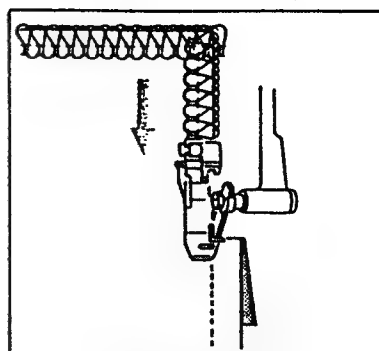
## outside corner



1. Cut the corner about 5-6 cm (2-3 inches) along the cutting line.

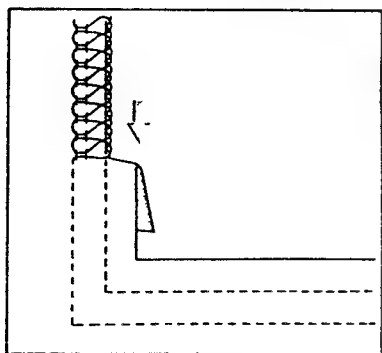


2. Sew a few extra stitches past end of fabric and stop machine.  
3. Raise needle and presser foot.  
4. Pull fabric slightly toward the back and pull out tangled thread from Throat plate.

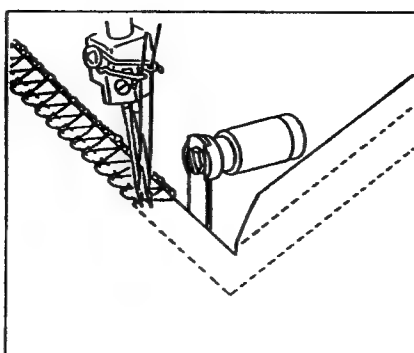


5. Turn fabric and position the fabric by lining up the cut line and knife.  
Lower the Presser Foot.  
6. Resume sewing.

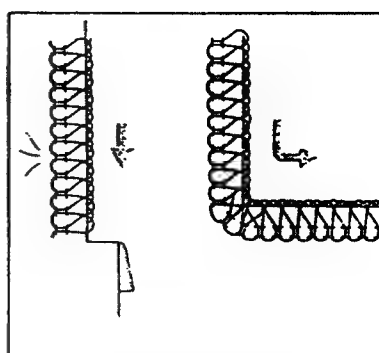
## inside angle and slits



1. Sew desired seam line until approach the corner.



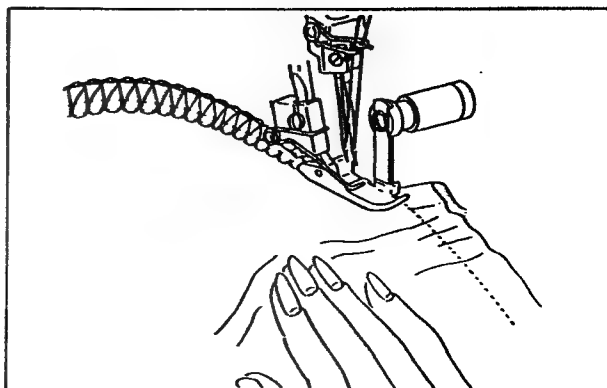
2. When you approach the corner, slow down and allow the knife to make one more small notch into the corner.



3. Straighten the fabric out in front of the knife and stitch completing the edge.

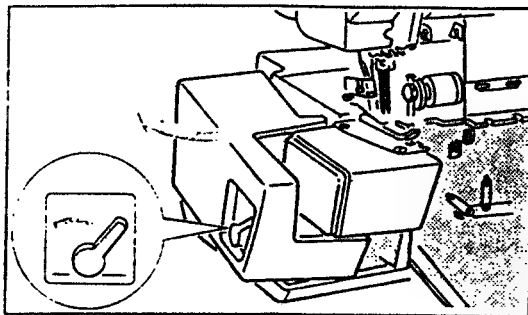
## outside curves

The machine can continue sewing when rounding a curve. There is no need to stop the machine and pivot. Push excess fabric toward the presser foot giving the machine more fabric and continue sewing as if sewing a straight seam.

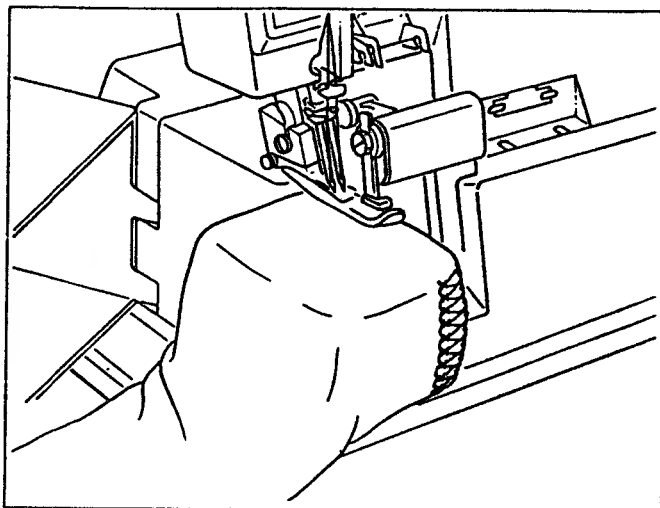


# FREE ARM SEWING

This machine will convert to free arm sewing by simply opening the Extension Table. It is used for sewing sleeves, trousers or similar places that are difficult to sew on a flat bed machine.



Turn lever located on left side of extension table to the front of machine and swing table out.

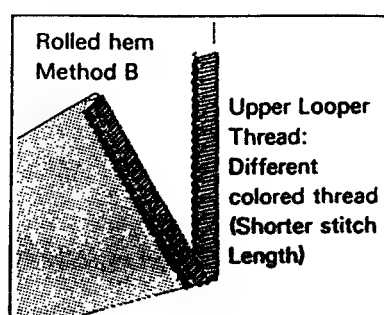
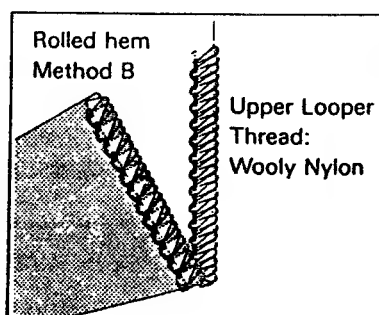
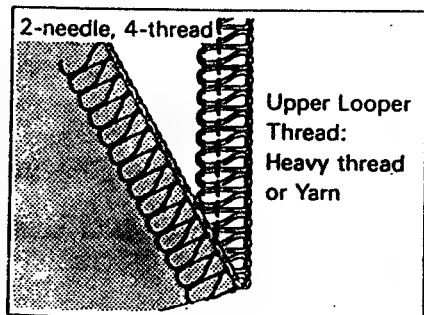


## DECORATIVE OVERLOCK

When you change the Upper Looper Thread to heavier thread or yarn, you can produce decorative overlock stitching.

Try using various types of thread to create attractive combinations experiment with different tension adjustments to produce a variety of decorative effects.

Examples;

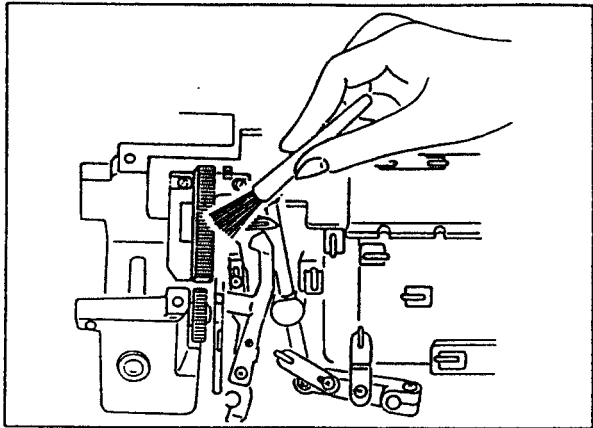


# CLEANING AND MAINTENANCE

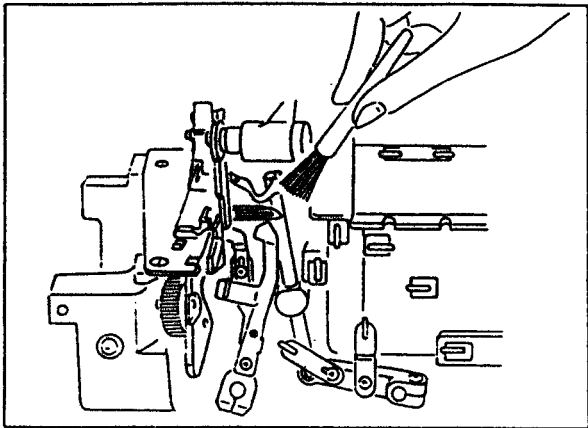
## cleaning

Fabric, thread scraps and dust may accumulate around moving parts and effect the functioning of machine. Unplug cord and clean machine with the brush provided with the accessories.

Brush around the fabric feed dog

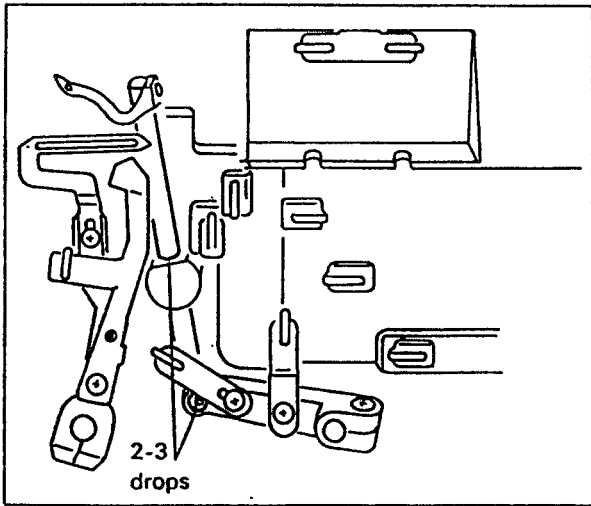
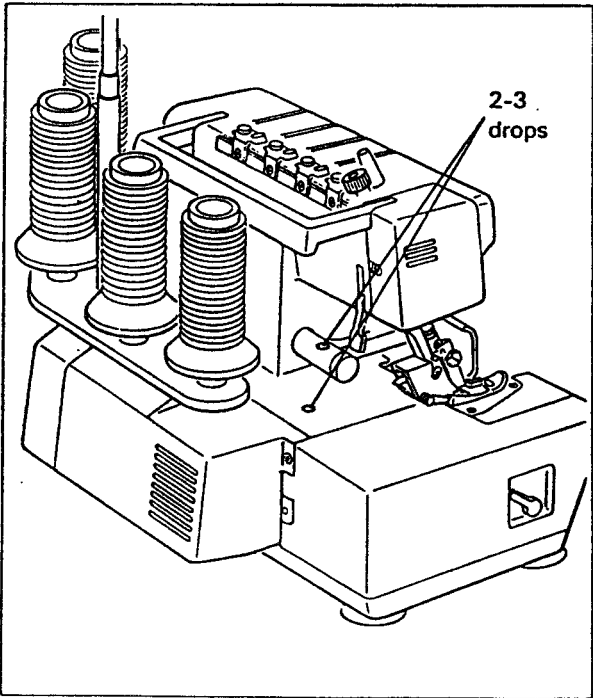


Brush inside of the front cover



## oiling

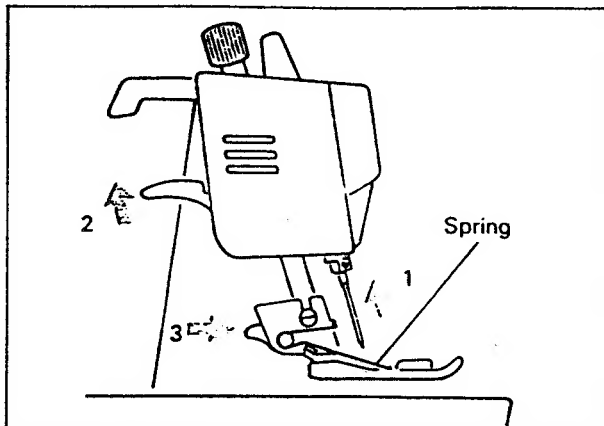
Critical parts used in this machine are made of special material that does not require oiling. Only the parts indicated with arrows shown below need oiling. Depending on use these should be oiled once or twice a month.



# removing the presser foot

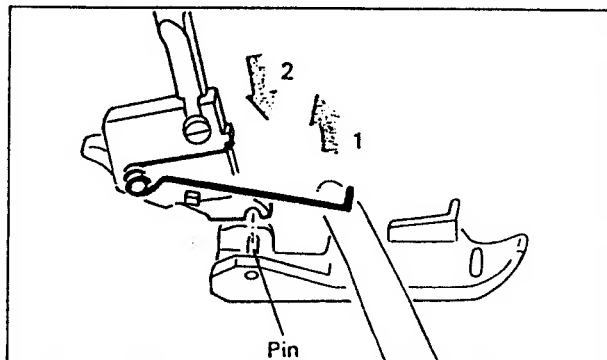
The presser foot can be removed easily by pulling the presser foot releasing lever.

1. Turn the hand wheel toward you until the needle is at its highest point.
2. Lift up the presser foot by raising the presser foot lifter.
3. Pull the presser foot releasing lever toward you, and presser foot will disengage.
4. Pull up the presser foot spring and remove the presser foot.

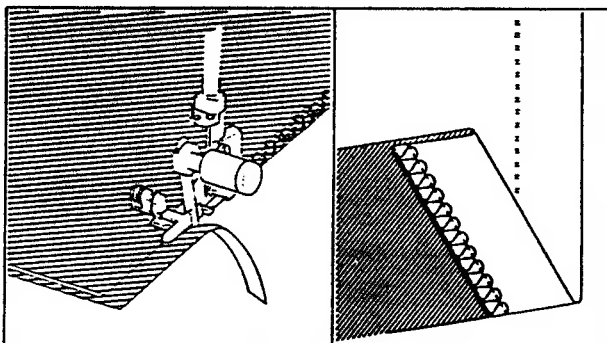


## REPLACING THE PRESSER FOOT

1. Pull up the presser foot spring and place the presser foot below the presser foot holder so that the pin on the foot fits into the hollow of presser foot holder.
2. Lower the presser bar with the presser foot lifter and the presser foot will snap into place.



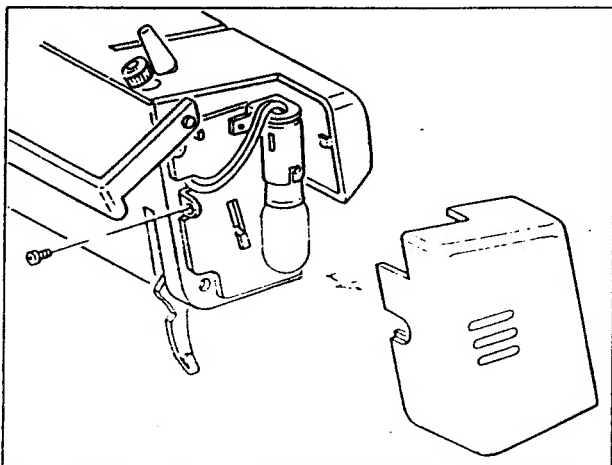
A Blind Hem Attachment Foot is also available as an optional extra. Please contact your Dealer for further details.



# changing the sewing light

If the sewing light does not light when power switch is turned on, replace the bulb.

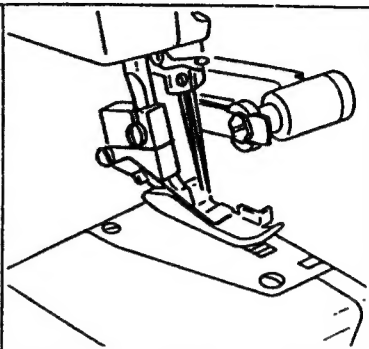
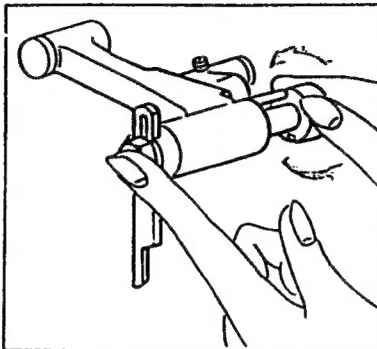
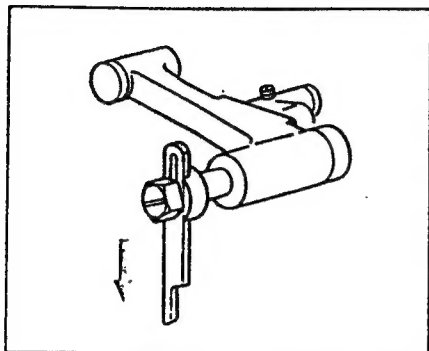
1. Unplug sewing machine from the wall receptacle.
2. Remove the Light Cover by loosening the screw.
3. Remove the bulb.
4. Replace with new bulb of same size wattage and size.
5. Replace the Light Cover.



# changing the lower knife

Exchange the Lower Knife as shown below when it becomes dull. An extra knife is provided with the accessories.

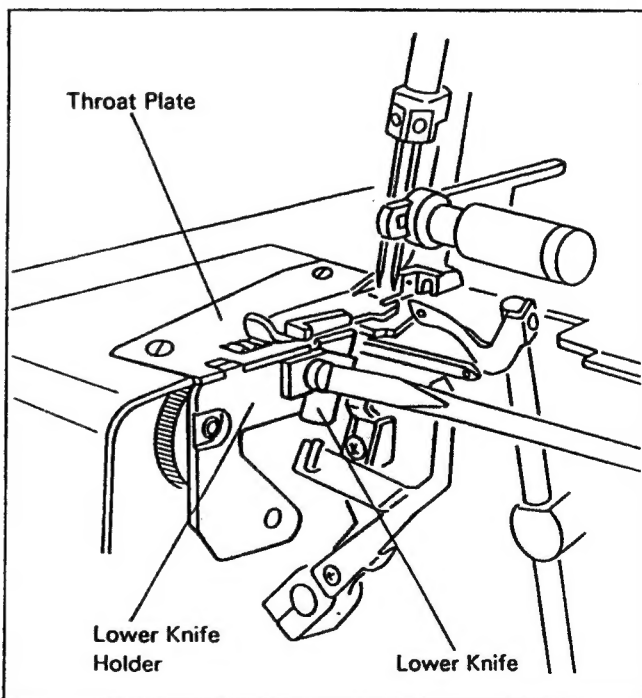
1. Unplug the machine.
2. Open the front cover.
3. Raise the upper knife as illustrated below.



- a. Turn hand wheel toward you until the upper knife is at its lowest point.
- b. Push the upper knife to the right as far as it will go and turn knob in opposite direction until it clicks into position.

4. Loosen the Lower Knife Screw and take out the knife.
5. Install new knife by inserting it into the groove of the knife holder. Be sure that the tip of the lower knife is lined up with the surface of Throat Plate, and tighten screw.
6. Return the Upper Knife to cutting position by pushing knife holder to right and turning knife toward you until it clicks into position. Close the front cover.

The upper knife is made of special hard material and should not require replacement under normal use. If it should chip or need replacement, call for your dealer.





# BEFORE YOU CALL FOR SERVICE

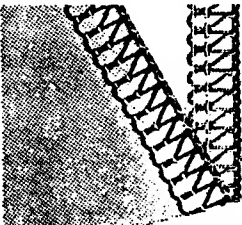

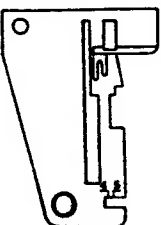
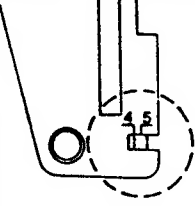
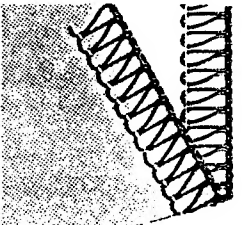

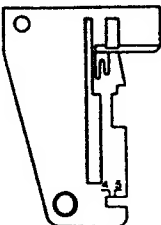
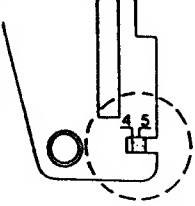
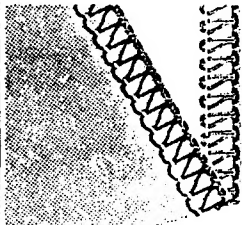

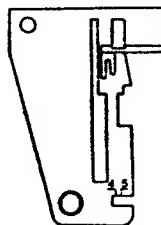
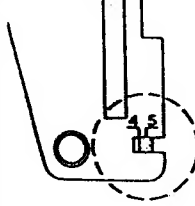
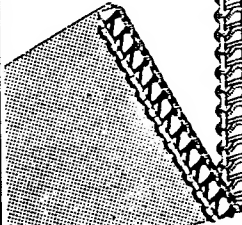

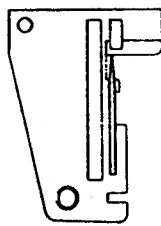
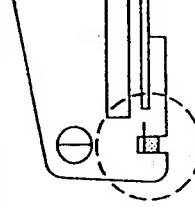
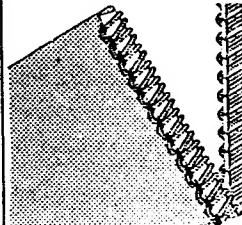

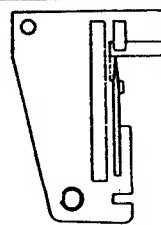
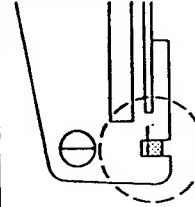
Your new overlock sewing machine was carefully inspected and tested at the factory and was in perfect working order when shipped.

Under normal conditions, if you carefully follow instructions for threading, operating and maintenance, your machine will give you years of trouble-free service.

Occasional difficulties are usually caused by a condition that can be easily remedied with a minor adjustment. Some possible problems, their causes and corrections are given here.

PROBLEM	CAUSE	CORRECTION	REFERENCE PAGE
THREAD BREAKS	• Needle inserted incorrectly	Reset needle	5
	• Thread tensions are too tight	Loosen thread tensions	12, 13, 15, 17, 18
	• Bent or blunt needle	Insert new needle	5
	• Machine not properly threaded	Rethread machine	7-10
	• Threads are caught in incorrect guide	Rethread machine	7-10
MACHINE SKIPS STITCHES	• Bent or blunt needle	Insert new needle	5
	• Needle inserted incorrectly	Reset needle	5
	• Pressure on foot insufficient	Increase pressure	14
	• Incorrect needle size or type	Insert correct needle	5, 6
	• Machine incorrectly threaded	Rethread machine	7-10
	• Tensions set too high	Loosen thread tensions	12, 13, 15, 17, 18
NEEDLE BREAKS	• Pulling fabric while sewing	Do not pull fabric	11
	• Incorrect size needle or thread for fabric being sewn	Choose correct needle and thread	6
	• Needle inserted incorrectly	Reset needle	5
MACHINE DOES NOT FEED PROPERLY	• Pressure on presser foot insufficient	Increase pressure	14
FABRIC PUCKERS	• Lower knife is dull	Change lower knife	23
	• Stitch length not suitable for fabric	Readjust stitch length	13
	• Thread tensions are too tight	Loosen thread tensions	12, 13, 15, 17, 18
	• Seam width not suitable for fabric	Readjust seam width	14
LOOSE STITCHES OR LOOPS FORMED	• Tensions not adjusted properly	Check thread tensions	12, 13, 15, 17, 18
MACHINE RUNS HEAVILY	• Dirt or lint in stitching mechanism	Clean the machine	21
MACHINE WILL NOT SEW	• Cord not plugged into electrical outlet	Check plug	4
	• Light and power switch not on	Turn on the switch	4

# STITCH SELECTION CHART

STITCH (Correct thread tension)	NEEDLE	THROAT PLATE	SEAM WIDTH	STITCH LENGTH
2-needle, 4-thread 	 Both	 Standard	 6.2 mm (align 4 mm line)	1-5 mm <div>Refer to Page 12, 13 for Tension Adjustment.</div>
1-needle, 3-thread (Wider) 	 Left	 Standard	 6.2 mm (align 4 mm line)	1-5 mm <div>Refer to Page 15 for Tension Adjustment.</div>
1-needle, 3-thread (Narrower) 	 Right	 Standard	 4-5 mm	1-5 mm <div>Refer to Page 15 for Tension Adjustment.</div>
Narrow Hemming-Method A 	 Right	 Rolled Hem	 1.5 mm (Actually 3.5 mm)	1-2 mm <div>Refer to Page 17 for Tension Adjustment.</div>
Narrow Hemming -Method B 	 Right	 Rolled Hem	 1.5 mm (Actually 3.5 mm)	1-2 mm <div>Refer to Page 18 for Tension Adjustment.</div>